USING GROUNDED THEORY FOR STUDYING BUSINESS PROCESS MANAGEMENT PHENOMENA

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Abstract

Grounded theory has emerged as a promising research approach for generating theory in emerging and relevant domains of IS research. In this paper we advance the use of grounded theory in one important and under-researched IS domain, business process management, which is characterized by an abundance of conceptual work with very little thorough theory development. We provide an illustrative case study that shows how grounded theory allowed us to develop theories about creative organizational processes, and the influence of creativity requirements on the management of such processes. Based on the experiences gathered, we then suggest a set of key issues that highlight why and when grounded theory can be particularly suitable for the study of phenomena associated with the business process management domain. We also provide examples for other inquiries that could benefit from the use of grounded theory.

Keywords: Grounded Theory Method, Business Process Management, Research Methods, Qualitative Research

1 INTRODUCTION

Development of theory is key to Information Systems research and to any scientific endeavour pertaining to the development of a deep and meaningful understanding of certain real-world phenomena that we observe in day-to-day life. Theory development can take many forms, from analysing available literature and extending existing theoretical models, to using common sense or experience (Eisenhardt, 1989). Over the last decades, other forms of theory development have also emerged, using case study research (Eisenhardt, 1989) or the grounded theory method (GTM) (Glaser & Strauss, 1967; Strauss & Corbin, 1998).

These types of qualitative research have gained increased popularity in IS research (e.g., Urquhart, 2001; Fernández et al., 2002), suggesting that grounded theory is becoming a well-accepted research method in IS research. The grounded theory approach essentially attempts to explore for, and develop, generalised formulations about the general features of a phenomenon while simultaneously grounding the account in empirical observations or data (Martin & Turner, 1986). One of the key advantages – and challenges – of the grounded theory approach is that it is applicable to research domains that are characterized by their emergence and lack of substantive theory.

One such domain is of the area of business process management (BPM), a recently emerging key area of IS research that is characterized through high relevance to practitioners (Gartner Group, 2009) but also the absence of rigorous or mature theoretical foundations (Rosemann et al., 2006). It is not the case that no empirical work or theory development has been carried out. Known studies report on the use of Delphi studies (Indulska et al., 2009), case studies (Bandara et al., 2005), focus groups (Raduescu et al., 2006), experiments (Mendling et al., 2009) or surveys (Recker, 2008) in their endeavours of exploring the BPM domain for generalizable insights and testable propositions. Continuing alongside the work of our colleagues, in this paper, we advance the Grounded Theory Method as an alternative research method for studying phenomena typically associated with business process management.

Over the last years, we have conducted a grounded theory study in order to investigate organizational creative processes (e.g., Seidel et al., 2008; Seidel, 2009). In this paper, we use examples from this study to illustrate the benefits and challenges in applying GTM to business process management research. Accordingly, our paper seeks to contribute to the IS body of knowledge by discussing the use of GTM in studying BPM phenomena. In doing so, we present a set of issues that are grounded in findings we have made conducting a BPM study where GTM was used in order to analyse data and generate theory.

We proceed as follows. The next section provides a brief overview of the use of GTM in IS research as well as a brief introduction into the area of BPM including a review of related BPM research. We then advance GTM as an appropriate research method for BPM. This is followed in Section 3 by the description of a GTM study on organizational creative processes. Then, we discuss in Section 4 issues that emerge when studying BPM phenomena through the lens of GTM. The paper concludes with a discussion of limitations and contributions and provides an outlook to future research endeavours.

2 BACKGROUND

2.1 Grounded theory

Over recent years, the grounded theory method has increased as a popular research approach employed in a number of IS studies (e.g., Orlikowski, 1993; Urquhart, 1998; Trauth, 2000; Fernández, 2003). Furthermore, several papers discuss issues around the usage of GTM in order to study IS phenomena (Urquhart, 2001; Fernández et al., 2002; Urquhart & Fernández, 2006). Usually, these

studies focus on some kind of IT-related processes. Urquhart (1998), for example, investigated processes of early requirements gathering, while Orlikowski (1993) studied the adaptation and use of CASE tools over time. The nature of the phenomena that were studied highlight that GTM can be used in order to gain contextualized, rich description of certain phenomena.

Grounded theory, in general, is seen as a method for building theory, not verifying it (Strauss & Corbin, 1998). The approach is based on two main principles. First, the process of theory-building is highly iterative, during which theory and data are constantly compared. This process can be referred to as *comparative analysis*. Second, GTM builds upon *theoretical sampling* as a process of data collection and analysis that is driven by concepts that emerge from the study and appear to be of relevance to the nascent theory (Strauss & Corbin, 1998).

Two main streams of grounded theory can be distinguished. Grounded theory was first introduced as a general qualitative research method by Glaser & Strauss (1967). Strauss (1987) and later Strauss & Corbin (1998) then revised this general understanding and provided detailed procedures and techniques for the analysis of data. In IS research, both types of approaches have been used in studies, those that are rather "Glasarian" (e.g., Fernández, 2003) and those that are rather "Straussian" (e.g., Urquhart, 1998). Urquhart (2001) notes that whether the more rigid approach suggested by Strauss (1987) works may depend on the nature of the phenomenon studied.

In the study conducted we applied the paradigm suggested by Strauss & Corbin (1998) – with some adoptions, which will not be discussed in detail in the interest of brevity – as their approach promised to lead to meaningful results with regard to the particular BPM phenomenon we were investigating. The Straussian approach is conducive to studying processes because "by answering the questions of who, when, where, why, how, and with what consequences, analysts are able to relate structure with process" (Strauss & Corbin, 1998 p 127). Straussian GTM studies typically follow a basic three stage procedure:

- *Open Coding:* In general, open coding is a process of identifying a set of themes or categories that appear to be relevant in order to describe and explain the phenomenon under investigation. Such category is a conceptual element of a theory – an abstract representation of something identified through the data as being significant. Moreover, the researcher identifies properties and dimensions of categories.
- *Axial Coding:* In axial coding, relationships between categories are identified. To do so, Strauss & Corbin (1998) distinguish different types of sub-categories, which they label conditions, actions/interactions, and consequences. By grouping categories, the researcher starts to link structure with process. This involves taking the categories that emerged during open coding and reassembling them with propositions about their relationships. These emerging propositions form a theoretical framework.
- *Selective Coding:* In selective coding the core category, the central phenomenon of the research, is identified and other concepts are related to the core category. Thereby, the nascent theory is integrated by linking the different categories to the central research phenomenon.

In summary, grounded theory is thought to ensure that nascent theory is informed by the data; it is not preconceived or forced upon the data but rather emerges from it. However, it has been argued in the literature that grounded theory studies do not completely omit any existent theory. Urquhart and Fernandez (2006), for instance, call this misconception the myth of the "researcher as a blank slate." Strauss and Corbin (1998) suggest that researchers may consult literature or experience in order to uncover examples of similar phenomena. When doing so, researchers should be self-reflective, so as to be aware of biases that may result from their own background knowledge. In the study we discuss in this paper, this suggestion encouraged us to constantly 'step back from the data', and to question ourselves whether concepts and relationships were actually grounded in the data, or were imposed by us through preconceived knowledge.

2.2 Research on BPM phenomena

Business process management (BPM) is a holistic management practice that (re-) emerged during the 1990s based on work on business process re-engineering (Hammer, 1990), total quality management (Powell, 1995) and process innovation (Davenport, 1993). BPM denotes a holistic, complex practice to organizational management that builds upon the notion of a business process, a series of tasks or activities that need to be carried out in order to collectively realise an organisational objective or policy goal, and a set of conditions that determines the order of the tasks (Hammer, 1990). These processes span an organization from end-to-end and include the involvement of organizational as well as IT resources, policies, regulations, contextual environments, risk factors and other phenomena. In its attempt to manage these processes effectively and efficiently, BPM addresses various aspects of strategic alignment, governance, methods, IT, people and culture (Rosemann et al., 2006) – indicating not only the complexity of the problem but also the complexity of the management approach.

The complexity and richness of business process management makes it certainly attractive as a research domain. And indeed, recent years have seen an increasing number of scholarly works examining various, discrete phenomena and artifacts pertaining to BPM. Much work, for instance, has been carried out in areas of process modeling artifacts (Rosemann et al., 2008), the development of process-aware information systems (van der Aalst et al., 2007), or approaches towards process optimization (Reijers & Mansar, 2005). This work has in common that it is mostly conceptual or analytical in nature, and considers *discretely* (i.e., in isolation) a particular BPM artifact, stripping away the contextual environment in which such artifacts are being put to use in practice.

This situation indicates a lack of substantive or holistic theory on the management of processes, the lifecycle of related phenomena (such as adoption or use of tools or methods), suitable governance mechanisms, decision making strategies and other related aspects of interest (de Bruin, 2007). While the lack of foundational theory denotes a challenge to academia and industry, it also denotes a window of opportunity for IS scholars to contribute to theory development in this emerging and relevant area of IS research. And indeed, some exploratory work has been carried out. For example, on the basis of case studies, Bandara et al. (2005) developed a theoretical model of the critical success factors of process modeling. Rosemann et al. (2006) use a multiple case study approach together with a Delphi study to develop a theory of BPM progression in organizations; and Recker (2008) used semi-structured interviews and the survey approach to building and testing a theoretical model of process modeling standard usage.

These studies are stimulating examples for theory development work, using ‘typical’ research methods prevalent in Information Systems. Continuing this work, we now advance the grounded theory method as an alternative, complementary or additional research method that we deem highly applicable to the BPM research domain.

2.3 On the Applicability of GTM to the Challenge of Studying BPM Phenomena

Business process management is concerned with the management of complex social, organizational processes that involve various stakeholders as well as other organizational or IT-based resources, policies or artifacts (Rosemann et al., 2006). We argue that the BPM domain, due to the complex and contextualized nature of its associated phenomena, is a primary application area of the GTM method. More specifically, we advance that GTM as an inductive, data-driven method can provide new insights into BPM phenomena.

This argument rests on three key observations. First, business processes are highly dependent on, and influenced by, the contextual environment in which they are embedded (Rosemann et al., 2008). Grounded theory aims at generating substantive theory and places special emphasis on the premise that contextual complexities and particularities need to be incorporated into an understanding of a particular phenomenon (Orlikowski, 1993). Thus, GTM as an inductive approach to generating theory

can help researchers to gain an in-depth understanding of business processes and themes related to these.

Second, BPM research focuses on practical issues and, thus, emphasizes practical relevance. Similarly, GTM studies are suggested to generate theories that are not only rigorously developed but also provide useful insights for practitioners. Glaser (1978) argued that GTM has the potential to generate theory of high practical relevance. His arguments include the capacity of grounded theories to support practitioners in providing additional aspects that were not empirically known to them as well as increasing the experts' ability to deal with new situations (Fernández et al., 2002).

Third, process management philosophies have at their core the notion of a business process as a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer (Hammer, 1990). Such processes are dynamic in nature and range from highly structured, to highly unstructured, even artistic processes (Hall & Johnson, 2009). Grounded theory is seen as being particularly fitting to study such types of processes because it facilitates "the generation of theories of process, sequence, and change pertaining to organizations, positions, and social interaction"(Glaser & Strauss, 1967 p 114). Orlikowski (1993) frames GTM as a research approach that specifically includes elements of process and change, thereby implying a close connection to the process phenomenon that builds the core of BPM.

In the following section we provide further details about the applicability of GTM to the study of BPM phenomena, by describing our experiences gathered in a GTM study of organizational creative processes. We complement our experiences with the consideration of extant literature on the use of GTM in IS research.

3 A STUDY OF ORGANIZATIONAL CREATIVE PROCESSES

3.1 Study objectives

The research aimed at studying *business processes that are characterized by creativity*. Creativity is a process, carried out in complex social settings, that leads to creative products that are both novel and purposeful (Woodman et al., 1993). While a number of theories exist that describe the occurrence of creativity, creative behavior and creative products (e.g., Rubenson & Runco, 1992), they are only of limited value when considering a process perspective. This is because, typically, business processes that contain creativity are constituted by both transactional, well-structured parts as well as creative parts where the first and the latter are closely interrelated. Thus, organizations are required to gain a holistic understanding of such end-to-end business processes; they need to understand what factors shape the process and what process-related strategies and IT systems can be applied in order to deal with particular characteristics, such as particular risks being caused by high demands for flexibility and high uncertainty with regard to the creative output. Understanding the phenomenon of creativity at a process level is imperative to the development and adaptation of information systems artifacts, as well as of organizational change within creative organizations, so as to ultimately enhance organizational effectiveness without compromising creativity. Besides this high practical relevance, such a study also exhibits an academic challenge, as it can contribute meaningfully to the IS body of knowledge by providing substantive theory that can then be used as a starting point to conduct research in other substantive areas in order to proceed to more general theory in the field of BPM. Consequently, the themes that were identified within the contextualization stage of this research were business processes that contain creativity, and the question of how these processes can be managed. This could be expressed in terms of a quite general research problem. Correspondingly,

Research problem: *How does creativity influence business processes and business process management?*

Note that this rather broad research problem was further developed into a set of more specific research questions which evolved during the course of this study. Specific research questions aimed at the identification of contextual factors, strategies and information technology that organizations apply in order to manage their processes, as well as intended and unintended consequences. In the following we demonstrate how the different stages of the approach (as described in Section 2.3) were utilized in order to study a particular BPM phenomenon. We also provide reflections hinting at different issues that came up throughout the study.

3.2 Data Collection

Data was collected from three Australian organizations from the field of film and visual effects production. Processes in this industry can be described as highly dependent on creativity, interdependent, intensively involving the client, complex, but also repetitive (Seidel, 2009). The products, such as visual effects sequences, are highly creative as they are characterized by both novelty and purposefulness.

Glaser and Strauss (1967) encourage researchers to include multiple data collection techniques, to allow the researcher to consider multiple viewpoints from which an emerging concept can be analyzed, substantiated, and its properties be developed. Our data collection strategy involved semi-structured interviews, process modeling and document analysis. More than 30 individuals were interviewed over two years. Process models provided the researchers with an advanced understanding of the nature of the processes being studied. This knowledge was then used in order to conduct further semi-structured interviews and theoretical sampling. For instance, the process models allowed the researcher to ask more focused questions with regard to IT systems, involved actors, or required resources. The analysis of documents, such as press releases, helped to further contextualize this research. Due to space limitations, in the present paper we limit our illustrations to data that was collected in semi-structured interviews.

3.3 Open Coding

Open coding started with a process referred to as microanalysis (Strauss & Corbin, 1998). That is, a line-by-line analysis of semi-structured interviews to identify initial codes was carried out. This enabled comparisons within the same group as well as comparisons with different groups (i.e. the case organizations). A close examination of data to identify both differences and similarities allows for fine discrimination and differentiation among categories" (Strauss & Corbin, 1998 p 102). Table 1 provides some exemplary open codes.

Table 1: Exemplary open codes

Quote	Open Codes / Concepts
*I think, managing expectations **[managing expectations]**. And the role that the producer has in terms of delivering to a client **[delivering to a client]**, because that would often be rare that along the line the client is directly involved. So, it's not that it's rare, but […] the producer is much more involved with the project every single day and they are reporting obviously outside to a client **[reporting to a client]**. And when the client comes in **[client touch points]** that's the moments when you are getting direct feedback from the clients **[getting feedback from clients]**. But, the role the producer has in managing those expectations **[managing expectations]** I think is really important.*	Reporting to a client Getting feedback from clients Managing expectations Delivering to a client Client touch points

By grouping concepts into categories, the number of units the researcher works with can be reduced. In our case, Table 2 provides an overview of how concepts were integrated into higher level categories. For example, various concepts could be identified as supporting the strategy of *communication with the client*, whereas other could be identified as supporting the category of *managing creativity internally*. Similar, different potential roles of persons in creative organizations could be grouped under the category of the *artist*, whereas other roles were grouped under the category of the creative supervisor. For example, *leads, visual effects supervisors, producers, and team leaders* were grouped under the category of the *creative supervisor* as these concepts share various characteristics that are of relevance in order to explain how processes in creative environments are managed.

Table 2: Developing categories

Category	Concepts
Managing the scope of creativity	*Avoid endless exploring, channeling creativity, encouraging creativity, creative buy-in, giving latitude, granting bending rights and responsibilities, providing stimuli to creative people, putting people under time pressure, restricting creativity*
Task allocation and team building	*Challenge creativity, finding a balance between technical and creative, identification of complementary skill sets, task allocation, trial and error, getting the right team*
Artist	*Visual effects artist, editor, sound editor, compositor*
Creative supervisor	*Lead, visual effects supervisor, producer, team leader*

Having formed categories, these could be further developed by identifying their properties and dimensions. As properties can vary along dimensional ranges, they give concepts variation. For example, *artists* are characterized by a certain *attitude towards IT*. This attitude varies on a continuous range from *IT-averse* to *IT-affine*.

Arguably, even though GTM concerns the emergence of theory from data, such research also starts with some (inevitable) preconceptions. Yet, through the open coding exercise, a number of apparent concepts emerged during the research that the researchers had not thought about beforehand. Moreover, open coding enabled the development of categories with great explanatory power that was expressed by properties and dimensions that enabled to cover a broad range of various situations. Thus, open coding provided rich insight into the processes that were studied. For instance, it became apparent that managing processes in creative environments requires the managers to gain an in-depth understanding of a complex interplay of various factors in order to decide what strategies and tactics can be used and combined in a particular situation.

3.4 Axial Coding

The central purpose of axial coding is to relate *structure* with *process*. In this study it was sought to understand the structure of processes in creative environments, that is, involved stakeholders, resources, etc., as well as how organizations effectively deal with such processes. In order to identify relationships, Strauss & Corbin (1998) propose a *paradigm* that differentiates categories into conditions (contextual, causal, and intervening), phenomena, actions/interactions, and consequences. Eventually, this process of relating categories results in the formation of conjectures or hypotheses. To that end, categories are related at a dimensional level.

In the present study, for example, *requirements specifications to the creative product* was identified as a contextual factor that impacts the context of *organizational creative processes*. The data further suggested that requirements specifications may vary from *low* to *very detailed*. Thus, requirements

specifications can be qualified dimensionally and then be related to the category of the creativity-intensive process. This insight, in turn, leads to the following preliminary proposition:

> *Detailed requirements specifications to the creative product (*dimensionally qualified factor*) lead to low variance in outcome (*dimensionally qualified consequence*) of the process (*phenomenon*).*

This way, the conditional structure was identified and thus structure was linked with process. The paradigm was useful to studying the phenomenon under observation. The distinction between contextual factors, strategies, and consequences enabled the researchers to generate an understanding of the studied processes, which very much represents common perspectives on business processes, as, for instance, evidenced in the wide range of different required capability areas for progression BPM in organizations (de Bruin, 2007).

3.5 Selective Coding

Axial coding was followed by selective coding, where the core category representing the central phenomenon of the study was identified and other (sub-) categories were related to it in order to proceed to an integrated theoretical scheme. The *creativity-intensive process* representing organizational creative processes was identified as being the core category of this research. When the act of selective coding was started, we could see that there was need to further group concepts in order to densify categories. For example, in open coding and axial coding two main groups of strategies could be identified: those referring to internally managing creative processes, and those referring to externally managed creative processes. Table 3 shows how the categories of *communication with the client* and *managing creativity internally* were grouped under a higher-level category *strategies in managing creativity-intensive processes*. The category of *strategies in managing creativity-intensive processes* by itself became a sub-category of *creativity-intensive processes*, explaining how creative organizations deal with the phenomenon of creativity within business processes.

Table 3: Relating categories to sub-categories

Category	Sub-category	Specific strategies
Strategies in managing creativity-intensive processes	Communication with the client	Creative brief, matching requirements with capabilities, providing stimuli, showing references, ongoing communication, showing work in progress, approval and review
	Managing creativity internally	Task allocation and team building, resource allocation, managing the scope of creativity, internal reviews, internal task breakdown

All contextual factors, strategies, and consequences were mapped to the creativity-intensive process. As business processes provide a cross-functional perspective onto an organization, they are of such complex nature that they can be viewed as a concept with the capacity of integrating both structural and dynamic aspects of the emergent theory. Moreover, selective coding led to a substantial reduction to few categories with greater explanatory power. Thus, a parsimonious theoretical frame was established that consisted of only a limited number of concepts grounded in a multitude of incidents.

4 ON THE USE OF GTM FOR STUDYING BPM PHENOMENA

Orlikowski (1993) justified the usage of grounded theory through its focus on contextual and processual elements, and its focus on the action of key players associated with organizational change. Obviously, these aspects are of relevance also to BPM: the researcher studies processes as well as the action of key players (usually referred to as actors) who participate in organizational processes or see to the governance or management of these.

As the above described example shows, understanding BPM issues not only requires understanding what tasks are carried out in what order and what resources are required and what is the process output (i.e., a mere 'process' focus). It also requires the researcher to understand a variety of contextual factors that impact the business process and also strategies and tactics that individuals and organizations apply in order to handle these complex phenomena. Moreover, one must understand both intended and unintended consequences. Such strategies and tactics, for example, often involve the application of IT systems (van der Aalst et al., 2007), involve the assessment and mitigation of organizational risks (Lambert et al., 2006) or other contextual elements (Rosemann et al., 2008).

In the BPM study conducted, the grounded theory study allowed us to uncover that organizational processes in film and visual effects production organizations are characterized by a complex interplay of artists, clients, creative supervisors, and organizational resources. Creativity in such business processes causes high unpredictability with regard to process structure, required resources and process outcome. Therefore, the processes are characterized by the iterations between creating a mutual understanding of the requirements of the creative product, generating the creative product, and reviewing it. In order to manage this process, creative supervisors act as process intermediaries and apply various strategies in both internally managing the process and communicating with clients while they pursue both creative and operational process performance.

The experiences in our study strongly suggest that GTM as an inductive, theory-building research method is appropriate to provide insights into BPM-related phenomena. We found that particularly the GTM focus on involving a variety of data sources as a valuable approach to research. The triangulation can help researchers to consider various viewpoints onto a particular phenomenon (e.g., a process), and, in turn, develop rich and comprehensive insights. Yet, with all benefits considered, we also encountered challenges and issues in our study. Table 4 provides an overview of such issues that advocate the use of GTM in order to study BPM related phenomena. The different issues are illustrated by examples from the above study.

Table 4: Using GTM for studying BPM issues

#	Issue	Description	Example
1	Practical Relevance	GTM aims at producing substantive theory of high practical relevance.	The substantive theory that was developed is applicable to the particular context. It provides practitioners with profound knowledge about factors that need to be considered when managing organizational creative processes. Moreover, the theory explains what strategies and tactics can be used and combined in order to handle specific situations.
2	Starting point for developing formal theory	Substantive theory can be the starting point to proceed to more general theory.	In our study we first generated a theory on business processes applicable to the substantive area of the creative industries. By engaging with existent theory we proceeded to a more general theory. In later work such theory may then be formalized and/or tested.
3	Accounting for contextual factors	GTM produces theory that accounts for both intervening and causal conditions and, thus, recognizes the context of business processes and business process management issues.	Particular attention was paid to the various factors that impact business processes in creative environments. It turned out that processes highly depend on both internal and external factors that must be considered when managing processes.
4	Inductive nature	The inductive, emergent nature of GTM enables researchers to discover new concepts and relationships that have not been considered in previous studies.	The GTM approach led to the development of complex categories with great explanatory power. For each category a number of properties was identified that enabled to explain a variety of situations. Thus, the method enabled not only to identify 'obvious' concept (e.g., tasks and roles) but also other concepts (e.g.,

		personal traits and abilities of actors) that need to be considered when managing processes.
5 Using multiple methods of data collection	Grounded theory enables the researcher to include a variety of data sources; for examples, process models, process descriptions or voiced process experiences, that can often be found in organizations.	Various techniques of data collection were used, including semi-structured interviews and the usage of process modeling techniques and related process documentations. This triangulation across methods provided rich insights incorporating different viewpoints.
6 Studying processes	GTM is particularly fitting in order to study process-related issues.	It turned out that the method could capture the dynamic nature of organizational processes. Different stages of processes could be identified and various strategies and tactics could be linked to these stages.
7 Guidelines	GTM provided guidelines how to actually conduct a study	The detailed procedures of GTM helped the researchers to rigorously develop theory without being lost in vast amounts of data.

Over and above the issues and examples described in Table 4, GTM also comes with the label of being *highly relevant to practice*. Glaser (1978) argues that grounded theorists can contribute a great deal by providing the 'man in the know' with substantive theory, and expresses a number of arguments suggesting the high practical relevance of GTM studies (see Table 5, leftmost column). Arguably, the BPM domain is a field characterized by high relevance to practice (Gartner Group, 2009). In this domain, the relevant 'man in the know' may be a BPM professional, process owner, or manager responsible for a particular process. We argue that GTM-generated theory does in fact provide these stakeholders with information and insights relevant to their task settings. Accordingly, in Table 5 we provide exemplary evidence for the arguments provided by Glaser (1978) to substantiate of relevance.

Table 5: Practical relevance of GTM studies of BPM phenomena

Arguments for practical relevance, adopted from (Glaser, 1978)	Practice of BPM
Practitioners get the ability of identifying additional consequences, conditions, and strategies beyond those that were empirically known to them	Particularly those BPM practitioners that are relatively new to a field will profit from theory that explains essential conditions, strategies and consequences. Thus, grounded theories can be used to inform practitioners about both intended and unintended consequences and, for example, may facilitate risk management.
Practitioners are supported in expanding the description and meaning of incidents by placing them into the greater context.	The BPM practitioner is able to abstract from a specific situation (such as a specific process failure), reflect on it, and develop new solutions to the problem situation at hand.
Increasing the expert's capacity to know by introducing a limited number of concepts that can be applied in various situations.	Grounded theorists try to generate categories with great explanatory power. Such powerful concepts can be easily remembered by BPM practitioners and applied in various contexts.
By expanding the practitioners' theoretical knowledge, they are enabled to expand their capacity to deal with new, more complex situations, as their knowledge is not limited to particular incidents anymore.	BPM practitioners can assume responsibility for more complex processes. By applying theoretical knowledge they are no more limited to only knowing certain instances of particular processes.
The theory helps experts to emancipate from restrictions of their specific expertise as theory enables them to become more open to change as they begin to see that certain incidents are mere patterns of a process.	Business processes in many industries are highly dynamic and require BPM practitioners to constantly adapt to new challenges. Thus, emancipation can be seen as an important enabler for process change.

Practitioners see their knowledge in a theoretical view and can capitalize on it through sharpened judgment and the improved ability to identify new strategies etc.	BPM practitioners become sensitized and are empowered to identify new strategies and practices in order to successfully manage processes.

5 CONCLUSION

In this paper we advanced the use of grounded theory as a research method appropriate to the study of phenomena typically associated with business process management. Based on the experiences gathered during a study of organizational creative processes, we outlined arguments for the use of GTM in general, and the ways in which it can be used for theory development in the context of Business Process Management in particular.

With our paper we seek to contribute to the ongoing discussion on the application of qualitative research methods to the IS discipline. We have argued that GTM is particularly fitting to study BPM phenomena. This is mainly reasoned by the nature of such phenomena and related studies: (1) BPM phenomena are often bound to particular contexts, (2) BPM research is thought to provide practical insights, and (3) business processes are characterized by interactions between various actors and IT artefacts to, collectively and collaboratively, carry out organizational processes.

We hope that our example stimulates fellow colleagues to also employ GTM in the area of BPM research. We believe that such studies can develop rich and comprehensive understandings into complex and dynamic phenomena such as business processes, and the management of these. We particularly would like to encourage fellow scholars to use GTM in multi-method approaches, for example, to inductively develop theories and hypotheses and, then, to test the propositions using typical deductive theory-testing methods such as experiments or surveys. Recently, we have seen some studies employing some form of multi-method research (Recker, 2008).

We believe that GTM, and more generally speaking theory development – could be highly beneficial to a range of BPM-related phenomena, such as the factors critical to success – or failure – of process optimization projects, the phenomenon of organizational adoption of BPM standards, the key contextual factors facilitating process change, or the embodiment of a process-aware culture in organizations, to name just a few.

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